

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE  
(REV. 2-82) PATENT AND TRADEMARK OFFICE

Atty. Docket No.  
1103326-0560

Serial No. 1  
~~to be assigned~~

INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

Applicant:  
Hans Carlsson et al.

Filing Date:  
to be assigned

Group: 1645

UNITED STATES PATENT DOCUMENTS

510 Beck PCT/PTO 19 MAY 1999

| *Examiner Initial | Document No.  | Date mm/dd/yy | Name         | Class | Sub-Class | Filing Date, if Appropriate |
|-------------------|---------------|---------------|--------------|-------|-----------|-----------------------------|
| <u>BP</u>         | 4 9 1 9 9 2 9 | 04/24/90      | Beck         |       |           |                             |
| <u>↓</u>          | 5 0 7 5 1 0 9 | 12/24/91      | Tice, et al. |       |           |                             |

FOREIGN PATENT DOCUMENTS

|           | Document No.  | Date     | Country | Class | Sub-Class | Translation Yes | No |
|-----------|---------------|----------|---------|-------|-----------|-----------------|----|
| <u>BP</u> | 9 5 1 1 0 0 9 | 04/27/95 | WO      |       |           |                 |    |
| <u>↓</u>  | 9 5 1 1 0 1 0 | 04/27/95 | WO      |       |           |                 |    |
| <u>↓</u>  | 9 6 3 6 3 1 7 | 11/21/96 | WO      |       |           |                 |    |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

|           |  |
|-----------|--|
| <u>BP</u> | Research in Immunology, Volume 149, 1998, J. L. Cleland,<br>"Development of stable formulations for PLGA/PLA in micro-sphere vaccines", pp. 45-47.           |
| <u>BP</u> | Journal of Controlled Release, 54, (1998), pp 15-27, D. Lemoine and V. Preat, "Polymeric nanoparticles as delivery system for influenza virus glycoproteins" |

Examiner: [Signature]

Date Considered: 5/08

\*Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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| 180               | 5 4 1 7 9 8 6 | 05/23/95      | Reid, et al.      |       |           |                             |
| ↓                 | 5 5 2 9 7 7 7 | 06/25/96      | Andrianov, et al. |       |           |                             |

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|-----|---------------|----------|---------|-------|-----------|-----------------|----|
| 180 | 9 8 2 8 3 5 7 | 07/Q2/98 | WO      |       |           |                 |    |
| ↓   | 0 5 9 1 4 5 2 | 05/06/98 | EP      |       |           |                 |    |
| ↓   | 0 7 2 4 4 3 3 | 12/30/98 | EP      |       |           |                 |    |

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| 180 | Dev. Biol. Stand, Vol. 92, 1998, R.K. Gupta et al., "Bio-degradable Polymer Microspheres as Vaccine Adjuvants and Devliery Systems", pp 63-78   |
| ↓   | Advanced Drug Delivery Reviews, 32, 91998), pp 225-246, D. T. O'Hagan, M. Singh, R. K. Gupta, "Poly(lactide-co-glycolide) Microparticles for the development of single-dose controlled-release vaccines". |

Examiner: [Signature]

Date Considered: 9/00

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|-------------------|---------------|---------------|-----------------|-------|-----------|-----------------------------|
| V80               | 5 5 3 8 7 2 9 | 07/23/96      | Czinn, et al.   |       |           |                             |
| ↓                 | 5 5 9 1 4 3 3 | 01/07/97      | Michael, et al. |       |           |                             |

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|-----|---------------|----------|---------|-------|-----------|-----------------|----|
| V80 | 0 7 6 6 9 6 7 | 04/09/97 | EP      |       |           |                 |    |
|     |               |          |         |       |           |                 |    |
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|----------|---|
| V80<br>↓ | Chemical Abstracts, Vol. 124, No. 6, 5 February 1996, (Columbus, Ohio, USA), Greenway, Terrence E., et al., "Enhancement of protective immune responses to Venezuelan equine encephalitis (VEE) virus with microencapsulaed vaccine", page 1, THE ABSTRACT No. 66330, vaccine 1995, 13 (15), 1411-1420. |
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| VBO                  | 5 6 2 2 6 4 9 | 04/22/97         | Hunter, et al. |       |               |                                   |
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## FOREIGN PATENT DOCUMENTS

| Document No. | Date | Country | Class | Sub-<br>Class | Translation<br>Yes No |
|--------------|------|---------|-------|---------------|-----------------------|
|              |      |         |       |               |                       |
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| VBO<br>↓ | Dialog File 155: Medline; 07045834 922 10497, Production of  |
|          | a conserved adhesin by the human gastroduodenal pathogen   |
|          | Helicobacter pylori; P. Doig, J. W. Austin, M. Kostrzynska,  |
|          | and T.J. Trust; Department of Biochemistry and Microbiology,   |
|          | University of Victoria, British Columbia, Canada., J. Bacteriol<br>(United States), Apr. 1992, 174 (8), pp 2539-47 |

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